THE BELMONT CHRONICLE.

AND FARMERS, MECHANICS, AND MANUFACTURERS' ADVOCATE.

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BY B. R. COWEN.

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POETRY.

Original.

TO MY ABSENT SISTERS.

BY LILY MAY.

At the pensive hour of twilight,
When the shades of night are near,
Faithful mem'ry brings before me
Scenes that once my heart did cheer;
And they seem to gather round me,
Sisters, brothers, as of yore;
Ere the hour of parting severed
Some, to meet on earth no more.

Then each well remembered feature
Wreathed in smiles, I seem to see;
And I list to hear their voices
Speaking kindly unto me;
But the shades of darkness gather,
As the twilight fades away;
And that pleasant vision endeth,
With the last decline of day.

In the silent midnight watches,
When the world is lost in sleep;
Kindred spirits round my pillow
Oft their nightly vigils keep
And they seem to whisper to me
In my dreams of pure delight;
That the hopes I fondly cherish
Shall survive the darkest night.

But the light of morning cometh,
Shining through my window pane;
And the call of duty, wakes me
From my happy dream again;
But I cannot greet you, Sisters,
Ye are scattered, far and wide,
All save she, our youngest darling,
Who now nestles by my side.

We still live and cling together,
Though I know not what *may* be,
Yet I pray that fate may never
Turn her footsteps far from me;
For our *mothers* heart is weary,
And 'twill be our loto to cheer
Her lone pathway, when she broodeth
O'er the absent ones, so dear.

Oft I see her pale lips quiver,
And her brow contract with pain;
As the thoughts that will not slumber,
Go carcering through her brain;
Yet no tear bedews her eyelids,
And no sigh escapes her breast;
Though such deep and hidden feeling
Oft disturbs her nightly rest.

When the storms of life beat o'er us,
Turn we to our parents kind;
For the solaces we co ct,
Through their sympathies we find;
They have tenderly watched o'er us,
Been our trusting guides through youth,
Pointing to the goal before us,
Through the paths of love and truth.

Thus our Heavenly parent watches,
O'er our footsteps here below;
And if virtues paths we traverse,
Nameless blessings he'll bestow;
Let us strive to shun temptation,
And the right to us is given,
To be firmly re-united
As a happy band in heaven.

November 1853.

NOVEMBER.

BY THOMAS HOOD.

No sun, no moon,
No morn, no noon,
No dawn, no dusk, no proper time of day;
No sky, no earthly view,
No distance looking blue,
No road, no street, no 't'other side the way,'
No end to any Row,
No indications where the Crescents go,
No top to any steeple,
No recognition of familiar people,
No courtesies of showing 'em,
No knowing 'em;
No travelling at all, no locomotion,
No inkling of the way, no notion,
"No go"—by land or ocean—
No mail, no post,
No news from any foreign coast;
No Park, no Ring, no afternoon gentility,
No company, no nobility;
No warmth no cheerfulness, no healthful ease,
No comfortable feeling in any member;
No shade, no shine, no butterflies, no bees,
No fruits, no flowers, no leaves, no birds,
No—VEMBER!

From the New York Tribune.

GREELEY'S ADDRESS.

[CONCLUDED.]

Let me next illustrate the importance and advantage of the careful analysis of soils:

A friend bought, one year ago, a small farm which had previously been under decent or ordinary cultivation, but which, it appears, had been for many years mainly fertilized with Gypsum or Plaster of Paris—an excellent thing its place, and which had doubtless done the land good service. But the new farmer's brother is a thorough chemist, devoting much attention to Agriculture; and he was invited to analyze the soil of this farm with a view to its prospective and economical improvement. Careful analysis showed a signal deficiency of Lime, but a superabundance of Sulphur and other ingredients of Plaster. Of course, at each successive application of Plaster the plants took up the Lime only, leaving all the residue to lie inert in the soil; and so the old farmer had for years been feeding his soil, at the rate of twenty to thirty cents per bushel, with the requisite Lime brought from a distance in the form of Plaster, while there was far better Lime burned all around, and for sale in abundance at six cents a bushel! The loss thus incurred may have averaged fifty dollars per annum—all for want of analysis that might have cost from ten to twenty dollars. And there are tens of thousands to-day farming just as blindly as did this old farmer.

Can there be any rational wonder that farmers seldom grow rich by such by such farming? How is a wise and judicious economy of means to be attained if ignorance and waste are to reap the rewards properly due only to intelligence and frugality? If I were to buy paper and other materials used in my business as carelessly and blindly as this old farmer bought manures and fertilized his land, I could not continue to print newspapers for a single year. Wiser, more prudent, more intelligent publishers would undersell and supplant me, and I must fail and be driven into some vocation where ignorance, heedlessness and unthrift secure the rewards designed by Providence for intelligence, industry and economy.

But let me pause at that word Industry.—"By Industry we thrive," is an old saw, which is very well its place; but the truth contained in proverbs is so curtly expressed that it often misleads more than it directs. Industry is indeed essential to thrift, and farmers, like other men, often need to be reminded of it. When I note one who is overwhelmed with "business," which calls him away from home two or three days in each week, and keeps him hanging about the tavern or store while his boys are at play and his potatoes crying for the hoe, I know whither *that* farmer is tending, & can guess about how long he will have any land to mismanage. And I think that, in the average, farmers waste more hours than mechanics. They have more idle time—not necessarily, but quite commonly so regarded—through bad weather, severe cold, too much wet, &c., than falls to the lot of almost any other class; and it is very easy to allure many of them away to shoot at other men's turkies when they should be growing food for their own. But while many waste precious hours, quite as much through heedlessness and want of system as indolence, I know another class who slave themselves out of comfort and out of thought by incessant, excessive druggery,—who are so absorbed in obtaining the means of living that they never find time to live—who drive through the day so that their bones ache and their minds are foggy at night; and are so overworked through the week that they can neither worship God nor enjoy the society of their families on the Sabbath. These men will often tell you they have *no time to read*, which is just as rational as for the captain of a steamship to plead a want of time to consult his compass and chart or keep a reckoning of his ship's progress. No time to read! do they not find time to plant and sow, to reap and mow, and even to eat and sleep! If they do, then they may find time, if they will, to learn how to apply their labor to the best advantage as well as to qualify themselves by rest and refreshment for working at all.—I venture the assertion that there are twenty thousand farmers in Indiana who would have been wealthier as well as more useful, more respected and happier men this day, if they had abstracted ten hours per week from labor during all their adult life, and devoted those hours to reading and thought, in part with a view to improvement in their own vocation, but in part also looking to higher and nobler ends than even this. Some men waste the better part of their lives in dissipation and idleness; but this does not excuse in others the waste of time equally precious in mere animal effort to heap up goods and comforts which we must leave behind so soon and forever.

--I read very few old books—I can hardly find time to master the best new ones; but I have no doubt that those who *do* read the very oldest treatises on Agriculture which have survived the ravages of time, will find Cato, or Seneca, or Columella, or whoever may be the author in hand, talking to the farmers of his day very much as our farmers are now generally talked to, and inculcating substantially the same truths: "Plow deeper, fertilize more thoroughly, cultivate less land, and cultivate it better"—such, I have no doubt, has been the burden of Agricultural admonition and exhortation from the days of Homer and Moses. It seems incredible to modern skepticism that millions of Hebrews could have for ages inhabited the narrow and rocky land of Judea; and it *would* be hard to believe, if we were ignorant of the Agrarian law of Moses, under which, as population increased, the inalienable patrimony of each family become smaller and smaller, and the cultivation of course better and better. Very few of us are at all aware of the average capacity of an arable acre, if subjected to thorough scientific culture. Many a family of four or five persons has derived a generous subsistence for year after year from a single acre. The story of a farmer who was compelled to sell off half his little estate of eight or ten acres, and was most agreeably surprised by finding the reward of his labor quite as large when it was restricted to the remaining half as when it was bestowed on the whole, was very current in Roman literature two thousand years ago. Why it is that men persist in running over much land, instead of thoroughly cultivating a little, defying not only Science, but Experience, the wisdom of the fireside as well as that of the laboratory, can only be accounted for by supposing that men have a natural passion for annexation, a pride in extended dominion, or else a natural repugnance to following good advice. Surely, if Wisdom ever cried in the streets, she has been bawling herself hoarse these twenty-five centuries against the folly of maintaining fences and paying taxes on a hundred acres of land in order to grow a crop that might have been produced from ten.

But the sinners against light and knowledge in our day have far less excuse than their remote ancestors, or even their own grandfathers. It was always well to urge deep plowing and the like; but so long as the plow was but a forked log or stick, with one prong sharpened for a coulter, and other employed as a beam, it was hardly possible to plow thoroughly. In our day, however, the advance from wooden plows through iron points and iron mold-boards to iron plows, steel points, steel plows, and subsoiling, has been so signal and decisive that the shiftless creature who with his two lean ponies skims and skins over the fields he ought either to cultivate or let alone,—scratching their surface mildly to a depth of three or four inches,—sins against such an array of light and knowledge that he is far less excusable than his ancestors who did not pretend to plow at all, but stuck in a seed here and there as they could easiest find a hole or make one, and trusted to Providence to give them an undeserved return for their spiritless and frivolous efforts.

The three main features of Agricultural advancement among the Anglo-Saxon race now-a-days are: 1. DEEP PLOWING, OR SUB-SOILING; 2. DRAINING; 3. IRRIGATION. I am quite aware that Draining should take precedence in the order of time, yet I believe, in point of fact, Deep Plowing has led to Draining, by demonstrating its necessity, & not Draining to Deep Plowing. We suffer immensely from drouth in this country. Probably the aggregate annual loss from drouth alone throughout the Union decidedly exceeds, taking one year with another, the entire cost of our Federal Government. Yet we know that the roots of most plants will descend to moisture, no matter how dry the surface, if the earth beneath them is porous, mellow and inviting. Hence we realize the immense importance of Deep Plowing; and, after doubling our teams and sinking our deepest Plows to the beam, we summon to our aid the Sub-Soil implement, and go down a depth beyond that of any single furrow.—But we soon find that the pulverization of the sub-soil, thus attained, has no permanent effect; that the water that leaches down to it settles it into a compact, solid mass, which the roots cannot perforate; and all our subsoiling needs to be done over again. The remedy that readily suggests itself is the freeing of the sub-soil from water by drains sunk below it, say three to six rods apart, & filled half way up with pebbles, with flat stones forming a sort of culvert, or, still better, laid with draining-tile or hollow brick, placed end to end, and forming a continuous channel from the highest part of any slope or grade to the brook which drains it. And now the sub-soil, supposing the drains well made and the drainage-way sufficient, is readily freed from any water settling into it and long retains the porous and permeable character communicated to it by deep plowing.

Of course, this does not exhaust the good effects of Draining. The sub-soil, thus loosened and freed from excessive moisture, becomes a source of food as well as drink to the plants growing above it; for that it is capable of feeding plants, no one, who has observed the rank vegetation growing out of the earth thrown up by draining or digging, can doubt. Instead of being like a slough in wet weather and like a brick in dry, the sub-soil retains sufficient moisture to cheer the plants but too little to indurate itself.—And the mean ten perature of the soil, hitherto lowered by the constant evaporation of the water contained in the sub-soil, is raised several degrees by the sun's rays, no longer contracted by the evaporating process,—at least, not to any such extent as before—so that the plants grow more luxuriantly, mature more rapidly, and so are earlier out of danger from frost. And beside this, the constant passage of currents of air through that portion of the drain not occupied by water,—and each drain should have an opening at its head as well as at its mouth—is an additional source of fertility through the chemical combinations it insures. It would be difficult to overstate the value, the importance, the profit, of Draining.

Many are accustomed to say, "*This* land needs no draining;" meaning that it is not habitually too wet. But draining proves as useful, if it is not as imperatively necessary, on dry soils as on wet. On dry lands it is required that the sub-soil, once broken up and pulverized, shall not, by the settling of moisture therein during the wet season, be hardened and rendered impervious again; these lands need to be rendered porous and penetrable by roots to a greater depth *because* of their dryness, they need to be shielded from the pernicious effects of constant evaporation in cooling the soil, and thus retarding the growth of its plants. There is very much land not worth tilling; but there is none that will justify tillage which would not reward Draining.

Of Irrigation, we in this country know very little by experience; but we are destined soon to know more, and to be profited by our knowledge. True, there are lands that may be readily drained and sub-soiled that cannot so readily be irrigated, owing to their elevation and a deficient supply of water. I apprehend, however, that these lands are not to be found in Indiana, nor in any other Prairie State, whose first peculiarities that strike a stranger are a superabundance of water in the rainy season and a scarcity thereof in the dry. The time is at hand when you will here require extensive and powerful pumping apparatus, if only to raise water for your heavy stocks of cattle and convey it to the pastures wherein they will be confined; and why not raise enough of the grateful fluid to refresh pastures and cattle alike?

But even though this assured and ample resource were non-existent, I maintain that water enough falls on your fields every year to keep them fresh and luxuriant through the summer, if it were saved and not wasted.—But most of it falls during the seasons when least is wanted, and is suffered to run off to the rivers and the ocean, carrying very much of the best juices of the soil along with it, when it should be retained in ponds and reservoirs to be pumped into barn-yards or drawn off to irrigate the fields during the fervid heats of summer. The apparent difficulty of doing this would vanish and the presumed expense be materially lessened on careful consideration.

I know not that I have traversed any country with more lively interest than beautiful, picturesque Lombardy. The dark pall of Austrian despotism enveloping it did not suffice to dim its natural loveliness and luxuriance, so greatly improved by the labor & genius of Man. It seems to have grown into its system of almost universal irrigation by imperceptible and unmarked degrees, and to be now producing double harvests annually as the result of some fortuitous impulse rather than of foresight and deliberate calculation. The magnificent plain of Upper Italy, which has for so many centuries been the field of combat where Goth and Latin, Frank and Hun, Gaul and German, have struggled for the mastery of Europe, slopes almost imperceptibly from the Alps to the Po, and the impetuous torrents which tear the rocky sides of the snow-crowned precipices are arrested and chastened in blue Lakes which lie at the foot of the mountains, smiling serenely out upon the plain. Thence the waters proceed with a more gentle and measured cadence to the great River, and are drawn off and stayed from point to point to fill the irrigating canals and ensure a rich reward to the husbandman's labors. Let any stream from heavy rains become a raging, foaming, milky torrent, and its waters have a value which the pure element could not command, and are drawn off on every side until the canals & reservoirs are filled and all danger of inundation precluded. Thus the waters are most valuable for irrigation just when they are most easily and abundantly obtainable for that purpose. The water which has irrigated one fertile garden or field, far from being exhausted, has been rendered more nourishing thereby, and may now be drawn off to fertilize the next field lying an inch or so lower, and thence to the next, and so on to the river, enriching & gladdening all it touches on its way. Irrigation is the life-blood of Lombardy; shall it be nothing, teach nothing, to us?

If there be a country on earth which one would suppose irrigation unsuited to Great Britain is that country. Her exceedingly moist, cool climate, coupled with her compact, clay subsoil (not universal, but very extensive) would seem to render a deficiency of moisture one of the very last evils to be apprehended or guarded against in her Agriculture. And yet her best farmers are now embarking rapidly and extensively in irrigation, finding it practicable and immensely profitable. Not here as in Lombardy, is the natural flow of the streams, in their descent from the hills to the rivers, relied on; but great pumps are employed, raising water by steam or other power from rivers, brooks and ponds, to a height whence it is carried by gravitation through metallic and gutto-percha pipes to every point where it is needed. Mr. Mechi, the ex-London merchant, who retired from trade with a competency to earn another by scientific farming, takes the lead in this application, and his estimates of the increased productiveness of lands by reason of irrigation and the profits thus secured would seem wild to any audience unfamiliar with the subject. I may state, however, that he fixes the expense of conveying his manures in a liquid form from his yard to every portion of his estate as equivalent to one penny sterling or two cents per cartload—that is to say, the fertilizing properties which were contained in a tun of muck or compost are now conveyed to the soil that requires them at the cost of one penny. That loading, teaming, unloading and spreading it the old way must have cost far more than this, you cannot doubt; and beside; the fertilizing liquid, being entirely free from seeds or weedy germs of any kind, and in a condition to be readily and totally absorbed by plants, must be worth twice as much as if applied in the old way. Now consider that this load of manure has been conveyed through and applied with many tuns of water, just when the soil is most thirsty, and the plants most needy, and you can readily judge that the tun of manure dissolved in water and applied through irrigating pipes at the cost of a penny, must be worth at least thrice as much as the same tun applied in the crude, solid state, at a cost of not less than thrice that sum. But I must not dwell on details. You have the general idea, and can follow it out at your leisure into all its necessary results.

III. What the Sister Arts teach as to Agriculture may be fairly summoned up in this proposition:

THE WORKMAN SHOULD BE COMPLETELY MASTER OF HIS MATERIALS AND HIS IMPLEMENTS. He should first thoroughly understand, in order that he may in the next place thoroughly control, the elements from which he is to evolve value and sustenance. He who should undertake to build a ship, in ignorance of the relative tenacity and resistance to pressure of the various woods and metals, would rush into a pursuit for which he had no capacity; so would he who should undertake the running of a steam-engine in ignorance of the nature and power of steam. Yet the man who attempts to farm with an imperfect knowledge of the nature and and properties of Soils in general, of the laws of Vegetation, the qualities and pecularities of the particular soils whereof his farm is composed and the cheapest means of renovating and increasing their fertility and productiveness, stands on the same platform with the ignorant shipwright or engineer, and braves like disasters, whereof the largest share will naturally fall to himself and his family. Agriculture is a pursuit so vast in its scope so various in its processes and objects, that it is difficult to lay down a general rule with regard to it that will admit of no exceptions; yet I will venture to propound one, which is as follows: *The cultivator whose farm is not more valuable and more productive as one result of each year's tillage, does not understand his vocation, and ought to learn it or quit it.*

Perhaps there is there is no single field of observation wherein the extent and disastrous effects of ignorance among farmers is more strikingly exhibited than in that of insect life and ravages. It has pleased the All-Wise to subject Agriculture to the chances and perils of Insect depredations, as well as to weeds, drouth, frost, inundation, and other evils. The end of all these is beneficence—the evolution and discipline of Man's capacities through the necessary counteraction and combat. Plants and domestic animals rightfully look to their owner for efficient protection: and he who allows his sheep to be killed by wolves, his fowls to be carried off by foxes, or his grain to be devoured by insects, is culpably faithless to his dependants and his duty. Yet how listlessly, thoughtlessly, hopelessly, do we see farmers stand by while their crops are destroyed by worms, birds, or weevil, without seeming to know that they have any thing to do in the premises! No Turkish fatalism is blinder or blanker than theirs. It is hardly yet six weeks since I saw whole counties of my own State covered and devasted by grasshoppers, who stripped the dry upland of every blade of grass, almost every green leaf, cutting the green oats from their stalks, the fruit from the trees, devouring corn in the ear, making the cleared land a desert, and pushing the cattle to the very verge of starvation. Yet there stood the farmers, gazing gloomily from day to day at the destruction of their cherished hopes of a harvest and the utter desolation of the whole country, yet not one asking of another—

"What shall we do to arrest this sweeping ravage? How shall we most readily, cheaply and surely clear our lands of these vermin!"

I do not pretend to know what the proper remedy was or is; but this I *do* know, that, had *I* been one of these farmers, I would have found a remedy or bankrupted myself in the search. I should have first interrogated the best authorities on Agriculture and Natural History, and, in case of finding no guidance there, I should have sowed one acre of my land bountifully with Salt; the next with Plaster; the next perhaps with Nitre; a fourth with Potash; and so on, using in all cases substances that I knew would be paid for by future harvests, unless I had reason to believe something else would be more efficient. Thus, before one week had elapsed, I would have found some caustic that grasshoppers could not abide; and having found it, I would have applied it until the last cormorant among them had been driven into the woods or turned over on his back. And this is the spirit in which every such invasion should be met and overcome. Had the farmers of any township promptly met, when the ravage first became serious, and agreed that one of them would try one possible antidote & another another, according as they happened respectively to have the material at command, and meet a few evenings later to compare notes on the results of their several experiments, they could not have failed to discover an efficient remedy within the first week. But they did nothing; and hence many of their farms are a desert, their Fall crops next to nothing, and half their cattle must be sold or killed for want of food.

Our farmers generally think and work better out of their own vocation than in it. A distant and towering evil arouses their hostility and evokes their energy much more readily than one of a less imposing but more mischievous character which assails them in their homes. Let the word go forth, "An army of invaders have landed!" and tens of thousands snatch instinctively their muskets and take the road; but here are armies all around them who are plundering them worse than any invaders would, yet hardly attract their notice. The Hessians who were hired to subjugate our fathers had no rest until the last of them was killed, captured or hunted home, more than seventy years ago; yet their attendant parasite, the Hessian Fly, has been plundering us ever since without resistance, and is now as formidable and destructive as ever. I cannot believe flies more difficult to conquer than men, if we would but fairly set about it.

IV. And here let me retrace my steps to illustrate a point in Industrial Economy which I have already incidentally touched, but have not illustrated as its importance deserves and as the prevailing misconceptions render necessary. I refer to *The Proportion of Means to Ends*, which the Artisan must always bear in mind, but which the Farmer seems too often to forget. No artificer presumes that the labor and material required for a fine table will suffice for a piano-forte; nor that a steam-engine can be constructed as cheaply as a churn. But the farmer, seeing trees and plants grow around him with weed-like facility and tenacity, often indolently imagines that *any* tree will grow so, and plants his rare and delicate fruit-trees, if he plants such at all, as if they were oaks or locusts. But Nature is inexorable in her requirement that the labor and care essential to the production of a choice fruit or plant shall be proportionate to the value of the product. You may grow Pine on yellow sand or Hickory on blue clay; but if you want choice Pears or Peaches you must devote much labor and expense to preparing and enriching the ground wherein your trees are to be set. Too many farmers, not heeding this law, or supposing that Nature may somehow be circumvented, obtain worthless fruit or none at all, and so abandon the culture in disgust and despair.

There is not now one grape-vine or fruit-tree, except of the coarsest and commonest kinds, where there should be twenty, taking one State with another; and one consequence of this is an enormous and perilous consumption of flesh as food, to an extent unknown in other countries. We are nationally surfeited with pork and tainted with Scrofula, not because we are so fond of pork, but because, for an important portion of each year, the majority of our population can get little beside. "The foolishness of preaching" will never suffice to correct this aberration; for men who work must eat, though their food be not the best; but give us an abundance of the choicest fruits and vegetables, with farmers who know how to grow them and truly educated housewives, who delight in preparing and serving them, and we shall enjoy health, elasticity and longevity to an extent now unknown. A flesh diet is the dearest, the least palatable and the least wholesome, and all that is needed to wean men from it is the presentation of a better. To secure this, we need only farmers who will feel a just pride in having the finest orchards and gardens—who will surround, not merely their own dwellings but those of their tenants and helpers also, with choice trees; and who will plant and keep planting until good fruit shall be so abundant that it can be no longer an object to steal it.

But I detain you too long, though many suggestions crowd upon me which I would gladly develop, did time permit. I would like to illustrate that inspiring theme, THE HARMONY OF INTERESTS between Farmer and Manufacturer, which renders each new factory or workshop established in an agricultural county or district a positive accession of wealth to every farmer who lives within the radius of its influence. You may readily perceive the addition of value given to each farm in Indiana by any canal or railroad which cheapens the cost of sending that farm's surplus produce to market—that is, to producers of the wares you require or the fabrics you consume;—and how much greater must be the saving, the benefit, to Indiana, of bringing to her soil or near it, instead of the fabrics, their manufacturers, so as to render them perpetual and more extensive consumers of her produce, I need not surely insist on.

But I pass over this and kindred topics, not as out of place but out of time, to dwell for a moment on the necessity that every where exists for increased facilities to Practical Education.

I have been exhorting your young farmers to study and master the vocation to which their lives are to be devoted—and that is right—but what if they were to turn on me with the inquiry—"*Where* shall we study?" How shall I answer them if they ask—"How and where are we to learn how to analyze soils and make ourselves familiar with all the Science which lies at the base of Agriculture as well as Mechanics?" I can only say to them, "We in New York are determined, as soon as may be, to have a PEOPLE'S COLLEGE to teach these important, vital truths to all who seek them, and to enable them to pay their way by their labor while learning; and we trust you in Indiana will speedily follow if you do not precede us." That is the best that can be said to-day; I trust ere long to be able to speak more to the purpose.

I do not seek to disguise the magnitude and the difficulty of the work I contemplate—that of revolutionizing our Agriculture, and making it the most elevated and ennobling, because the most intellectual, pursuit of man. I realize the mountains of Prejudice that are to be leveled, the Dead Sea of Ignorance that must be filled up, the constitutional immobility of Conservatism that must be overcome, before the end can be attained. But I see also how "the stars in their courses" fight in behalf of Progress and Enlightenment—how immense has been the march of Intelligence as well as Invention and Physical Improvement in our age—how the Steamboat, the Railroad, the Steam Press, the Ocean Steamship, the Electric Telegraph, are speeding us onward with a momentum the world has never before known—and I hear a voice from all these and many a kindred impulse and influence, bidding Man the Cultivator advance boldly and confidently to take his proper post as lord of the animal kingdom and wielder of the elements for the satisfaction of his wants and the development of his immortal powers. I hear them calling him to vindicate the discernment or the presience of those glorious old Greeks who gave our Earth in her young luxuriance the name of *Kosmos* or BEAUTY—a name belied by our scarred and stumpy grain-fields, our seared and barren pastures, our bleak and arid deserts, our foul, malarious marshes; but which Science shall yet justify and joyous Labor perpetuate. In spite of all distractions and impediments, 'the world *does* move," and even the most sluggish & stubborn are carried along with it. Our Agriculture, as a whole, is more skillful and efficient than it was thirty or forty years ago; and it is now improving in accelerated ratio. Even I, the descendant of a line of poor cultivators, stretching back, very likely, to him who through his own blindness and fatuity lost the situation of head-gardner in Eden—even I feel the all-pervading impulse toward improvement and reform. I can never be a Scientific farmer—I am too old and too heavily laden with duties and cares for that—but my son, if he lives, shall be. The little I can teach him shall at least inspire him with a craving for more, and set him on the right track to learn it. And thus tens of thousands are growing up all around us—children, perhaps, of ignorance and inefficiency—who shall be leaders and guides in the great work to which this Address is a feeble but earnest contribution.

Hawthorne, in his 'Three-Fold Destiny," tells the story of a young man who wandered all the world over in quest of three wonderful incidents, which, it had been predicted, should occur to him; and returned disappointed and spirit-broken to find them all under the shadow of his paternal roof. I perceive in this tale, as in every word of true genius, some reflection of a universal fact; an appeal to the general experience and the heart of Humanity. How many have chased deluding phantoms through the fervid noontide of life, only to find, as evening shadows drew around them, that Ambition had no goal. Achievement no triumph, to equal the calm, perennial joys of a humble rural home!

I commend the moral of Hawthorne's story to our young men, who are from year to year setting forth so bravely to wrench fortune from the golden sands of California, or win her among the young cities that, emulating the growth of Jonah's gourd, are beginning to dot the American shores of the great Pacific. Far be it from me to insinuate that their venture is a wild one, and their hopes necessarily doomed to untimely blight. I have faith in American energy; still more in sturdy, persistent, intelligent Industry; and I feel sure that a clime so genial, a country so diversified in its natural features, a soil so deep and virgin, as those of California, must proffer many inducements to the hardy, resolute pioneer, even though that soil be here and there sprinkled with gold. Such an enterprise as the peopling and settling of a country so new and so remote from prior civilization, will, of course, demand its martyrs: in its prosecution thousands will die, and tens of thousands fail; but the enterprise itself will neither die nor fail; and many of those who fitly embark in it will achieve, at last, success and competence. What I would say is addressed rather to the tens of thousands, whom filial or parental ties retain among us, while they impatiently champ the bit and say, "Why am not *I*, too, at liberty to cross the Rocky Mountains and gather my share of the golden harvest!" To these I would earnestly say, "Believe not, repining friends! that California and fortune are inseperable; nor forget that there were broad avenues to success and competence before Fremont unfurled his Bear standard in the valley of the Sacramento." Nay: be assured that, right here in Indiana, are ample *placers* for all who will resolutely and wisely work them—*placers*, whereof the yield may be less per pan or day than that of some of the richest 'guleches' on the Feather or the Yuba; but then it is certain, inexhaustible, and sure to prove more and more abundant with each returning season. The deeper *these* mines are worked, the more ample is the return; they require no outlay of skill or labor in "prospecting;" for every arable rood will reward the digger's efforts, and from the Ohio to the Missouri he will find hardly any other than "pay-dirt."

As for me, long-tossed on the stormiest waves of doubtful conflict and arduous endeavor, I have begun to feel, since the shades of forty years fell upon me, the weary, tempest-driven voyager's longing for land, the wanderer's yearning for the hamlet where in childhood he nestled by his mother's knee, and was soothed to sleep on her breast. The sober down-hill of life dispels many illusions while it developes or strengthens within us the attachment, perhaps long smothered or overlaid, for "that dear hut, our home." And so I, in the sober afternoon of life, when its sun, if not high, is still warm, have bought me a few acres of land in the broad, still country, and, nearing thither my household treasures, have resolved to steal from the City's labors and anxieties at least one day in each week, wherein to revive as a farmer the memories of my childhood's humble home. And already I realize that the experiment cannot cost so much as it is worth. Already I find in that day's quiet an antidote and a solace for the feverish, festering cares of the weeks which environ it. Already my brook murmers a soothing even-song to my burning, throbbing brain; and my trees, gently stirred by the fresh breezes, whisper to my spirit something of their own quiet strength and patient trust in God. And thus do I faintly realize, but for a brief and flitting day, the serene joy which shall irradiate the Farmer's vocation, when a fuller and truer Education shall have refined and chastened his animal cravings, and when Science shall have endowed him with her treasures, redeeming Labor from drudgery while quadrupling its efficiency, and crowning with beauty and plenty our bounteous, benificent Earth.

NO SABBATH.

In a "Prize Essay on the Sabbath," written by a journeyman printer of Scotland—which for singular power of language and beauty of expression has never been surpassed—there occurs the following passage. Read it, and then reflect for a while what a dreary and desolate page would this life present if the Sabbath was blotted out from our calculations:

"Yorkfellow! think how the abstraction of the Sabbath would hopelessly enslave the working classes, with whom we are identified. Think of labor thus going on in one monotonous and continuous and eternal cycle—limbs forever on the track, the fingers forever plying, the eye-balls forever straining, the brow forever sweating, the feet forever plodding, the brain forever throbbing, the shoulders forever drooping, the loins forever aching, and the restless mind forever scheming.

"Think of the beauty it would efface, of the merry heartedness it would extinguish, of the giant strength it would tame; of the resources of nature that it would exhaust, of the aspirations it would crush; of the sickness it would breed; of the projects it would wreck; of the groans that it would extort; of the lives that it would immolate; and of the cheerless graves that it would prematurely dig! See them toiling and moiling, sweating and fretting, grinding and hewing, weaving and spinning, strawing and gathering, mowing and reaping, razing and building, digging and planting, unloading and storing, striving and struggling—in the garden and in the field, in the grainery and in the barn, in the factory and in the mill, in the warehouse and in the shop, on the mountain and in the ditch, on the road-side and in the wood, in the city and in the country, on the sea and on the shore, on the earth, in days of brightness and days of gloom. What a sad picture would the world present if we had no sabbath."

CHLOROFORMING BEES.—A statement has recently been very extensively circulated that chloroform had been found by a Mr. Smith, of Edinburg, to be a most admirable means of putting bees to sleep for a short time, during which as much honey could be removed as was desired. A writer in the Boston Cultivator has tried chloroform according to Mr. Smith's plan, and found not only that the bees were soon put to sleep, *but they have been soundly sleeping ever since.*